

ABSTRACT OF THE DISCLOSURE

In a detecting apparatus for detecting a steering state at a steering member (1) by respectively providing targets (34 and 35) in the shape of a spur gear having teeth portions (34a and 35a) to an input shaft (32) connected to the steering member and an output shaft (33) connected to the input shaft (32) by interposing a torsion bar (31), when an allowable maximum value of rotational torque applied to the steering member is designated by notation T, a number of teeth Z of the teeth portions (34a and 35a) and a spring constant K of the torsion bar (31) are determined to satisfy the following inequality,

$$360 \text{ (deg)} / Z > T \text{ (Nm)} / K \text{ (Nm/deg)}.$$